TCS Algo Retail™: Lead the next frontier of retail

Automated. Intelligent. Autonomous.

Abstract

The retail trajectory is being constantly shaped by evolving customer behaviors and expectations, and macro-economic changes. Executing strategic decisions in today's complex omnichannel retail landscape requires retailers to factor a wide array of variables in real time beyond the realm of human endeavor to arrive at assured levels of accuracy.

Further, businesses are now under pressure to adapt to business models which allow participation in digital ecosystems where several companies across industries collaborate to enable customer journeys. They need to focus on their core value propositions while creating an infrastructural and operational framework that facilitates collaboration and the ability to sustain in a competitive environment.

Overview

TCS Algo Retail™ is our patented approach to transform organizations into resilient, adaptable, nimble algorithmic enterprises by seamlessly orchestrating data and algorithms across the retail value chain, and reimagining processes with automation and intelligence. The real value is derived when these capabilities are used in combination with artificial intelligence (AI), internet of things (IoT), blockchain, and other emerging technologies to amplify and augment human ingenuity.

We are helping global retailers leapfrog their growth and transformation journeys with TCS Algo Retail by harnessing our deep industry expertise, amplified by strategic investments in products and platforms, AI talent, innovation hubs, and curated digital ecosystems.

OUR AI-POWERED SOLUTIONS

- TCS Cognitive Supply Chain
- TCS Future Stores
- Cognitive Digital Operations
- TCS Future Fashion

Identify where to intercept the value chain with Algo Scan, an assessment framework; and accelerate the transformation with a library of use cases and algo containers.

OUR AI-POWERED PRODUCTS

- TCS OmniStore™
- TCS Optumera™
- TCS Optunique™

Define the future with award winning products built on machine first, cloud first, and microservices architecture, and powered by patented algorithms that harness our deep industry expertise.

TCS PACE PORTS

- Amsterdam, Netherlands
- London, United Kingdom
- New York, USA
- Tokyo, Japan

Solve real world business problems with design thinking workshops at our physical innovation hubs by collaborating with academia, startups, and TCS Research.

PARTNERSHIPS AND COIN

- Alliances and partnerships with technology leaders
- 3,000 tech startups
- 300 venture capitalists
- 120 venture capitalist firms

Access unique and differentiated cutting edge solutions and the knowhow to leverage them with rapid prototyping.

OUR RESEARCH

- Retail research
- Academic partnerships with 50 leading universities and research institutes including MIT CISR, Carnegie Mellon

Leverage our diverse research and exploration of early-stage disruptive technologies to manage technology risk and innovate.

Lead the next frontier of retail with TCS Algo Retail

Our solution

Our portfolio of AI-powered platforms and solutions includes:

- **TCS OmniStore™**: A future commerce platform that enables unified customer journeys catering to new channels and brand expansions

- **TCS Optumera™**: A strategic retail optimization suite that enables integrated, intelligent merchandising and supply chain decisions

- **TCS Optunique™**: An enterprise personalization solution that delivers contextual hyper-personalization across omnichannel journeys

- **TCS Cognitive Supply Chain**: A suite of solutions for building agile supply chains powered by phygital ecosystems, man-machine co-habitation, and touchless supply chain

- **TCS Future Stores**: A suite of solutions for reimagining customer experience and optimizing store operations

- **Cognitive Digital Operations**: A suite of solutions for reimagining digital CX, scaling e-commerce, and optimizing business processes

- **TCS Future Fashion**: A suite of solutions for reimagining the fashion value chain from design to selling

Benefits

Leading retailers worldwide are realizing exponential growth with our patented approach through faster time-to-market, improved sales and margins, higher CLV, and lower operational costs. TCS Algo Retail enables growth with profitability and cash flow by focusing on three key areas:

EXPERIENTIAL & UNIFIED FUTURE FASHION	Unified Voyage	Sales Uplift **2-3%**	Net Promoter Score **7-10%**
	Immersive Stores		
	Hyper-Personalization	Engagement and Traffic Conversion Rate by Channel **8-10%**	
	Intelligent Range and Assortment		
FINANCIAL EXCELLENCE AND OPERATIONAL OUTPERFORMANCE	Cost-to-Serve Optimization	Cost of Doing Business (CODB) **3-5%**	
	Synergistic Network and Plug-and-Play Ecosystem		
	Machine First and Co-botic Operations	Cost of Sales **50-100** BP	
	IT and Business Process Service Optimization		
SUSTAINABLE CORE	Green Loop and Circular Value Chain	Effort for Sustainability Data Management **80%**	Energy Consumption **15-20%**
	Responsible Sourcing		Traceability of Product Packaging **100%**

Unlock exponential business outcomes

The TCS advantage

TCS Retail partners with over 100 global retailers, driving their growth and digital transformation journeys. We are helping retailers become machine-first businesses with:

- **Future-ready business models:** TCS is enabling retailers to transform customer experience and drive growth by building differentiated capabilities through a business-centric, product-based operating model; enterprise-wide adoption of agile; technology transformation through a Machine First™ approach, and cloud-first modernized platforms; and building ecosystems and new models.

- **Business-value focused and technology-powered transformations:** Knowing where and how to intercept the value chain with technological interventions is key to realize business outcomes from transformation. Our approach begins with building a strategic realization roadmap aligned with organizational vision and priorities. Through a structured scan of the landscape and design-thinking workshops with business teams, we identify use cases for automated, intelligent, and autonomous operations. Our curated library of AI algorithms and containers enable catalytic acceleration of transformation without adversely impacting the existing landscape and investments.

- **Strategic partnerships:** Our strategic investments in TCS Pace Ports™, curated Co-Innovation Network (COIN™) of startups, academic partnerships with leading universities, our AI talent pool, and strategic alliances with Microsoft, Google, and leading tech vendors are helping global retailers transform into automated, intelligent, and autonomous enterprises.

About TCS Retail

TCS Retail partners with over 100 global retailers, driving their growth and digital transformation journeys. We are solving their toughest challenges by harnessing our deep consulting and technology expertise, amplified by strategic investments in products and platforms and research partnerships with top universities; a co-innovation ecosystem of over 3,000 startups; and Nucleus, our in-house innovation lab.

Retailers worldwide are adopting the TCS Algo Retail™ framework, a playbook for integrating data and algorithms across the retail value chain, thereby unlocking exponential value. Our solutions and offerings leverage the combinatorial power of new-age technologies to make businesses intelligent, responsive, and agile. TCS' portfolio of innovative products and platforms include AI-powered retail optimization suite TCS Optumera™, unified commerce platform TCS OmniStore™, and AI-powered enterprise personalization solution TCS Optunique™. With a global team of 40,000 associates, we are powering the growth and transformation journeys of leading retailers worldwide.

Contact

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About Tata Consultancy Services Ltd (TCS)

Tata Consultancy Services is a purpose-led transformation partner to many of the world's largest businesses. For more than 50 years, it has been collaborating with clients and communities to build a greater future through innovation and collective knowledge. TCS offers an integrated portfolio of cognitive powered business, technology, and engineering services and solutions. The company's 469,000 consultants in 46 countries help empower individuals, enterprises, and societies to build on belief.

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